Shifting Sands

The Changing Shape of Atlantic Canada

Economic and Demographic Trends
and their Impacts on Seniors

Produced for the Health Promotion and Programs Branch
Atlantic Regional Office, Health Canada
by Susan Lilley and Joan M. Campbell
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Lorraine Croft, Department of Health and Community Services, Newfoundland and Labrador
Pat Malone, Department of Health and Social Services, Prince Edward Island
Peggy Norris-Robinson, Department of Health and Community Services, New Brunswick
Jane Oram, Health Promotion and Programs Branch, Atlantic Region, Health Canada
Irene Rose, Health Promotion and Programs Branch, Atlantic Region, Health Canada
Valerie White, Nova Scotia Senior Citizens' Secretariat.

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Table of Contents

Introduction 1

Our Aging Population 4

Our Changing Economy 15
The Economic Consequences of Population Aging 19

The Outlook for the Well-being of Seniors 20
The Social and Economic Environment 20
Education 20
Employment and Retirement 21
Income and Social Status 23
Social Support Networks 26
The Physical Environment 28
The Natural Environment 28
Housing 29
Transportation 30
Health Services 31
Prevention and Promotion 32
Home Care 32
Institutional Care 33

Shaping Our Future 35

Bibliography 38

Endnotes 43

List of Figures

Figure 1: Conceptual Framework 2

Figure 2: Population Age Pyramids for Canada and the Atlantic Provinces ..... 7 - 9

Figure 3: Percentage of the Atlantic Region Population by Age 10

Figure 4: Percentage of Seniors in Rural and Urban Areas in Atlantic Canada 12

Figure 5: Dependency Ratios for the Atlantic Region and Canada 13

Figure 6: Projected Average Annual GDP Growth Rate, 1997 - 2020 16

Figure 7: Average Annual Personal Disposable Income Growth 18

List of Tables

Table 1: Projected Population by Age and Sex, Atlantic Region 5

Table 2: Projected Percentage of Population 20 and Under, 65 and Over and 80 and Over. . . 6

Table 3: Urban / Rural Seniors in the Atlantic Provinces 12

Table 4: Projected Population by Province 14

Introduction

The world's population is aging rapidly. In recognition of this significant demographic trend, the United Nations General Assembly has declared 1999 as the International Year of Older Persons (IYOP). By examining economic and demographic trends in Atlantic Canada, this document addresses these two of the five objectives for IYOP in Canada:

- help Canadians understand how individual and societal decisions made today will affect individuals and society in the future
- encourage all sectors of society to be responsive to a diverse and aging population in a rapidly changing world.

The purpose of this paper is to increase public understanding of demographic and economic trends and their impacts on seniors, and to encourage policy makers to begin to plan for an older population.

All of us hope to live for many years in good health. We are all concerned about the health care system, and wonder whether it will be there for us when we need it. Though these concerns may be well-founded, there is much more to health than health care. Being healthy requires clean, safe environments, adequate income, meaningful roles in society, and good housing, nutrition, education and social support in communities. In fact, most improvements in health status over the last century have come through public policies relating to these broad determinants of health. Developing healthy public policies in all government departments is the key to promoting the well-being of today's seniors and the senior generations to come. IYOP provides an opportunity for all sectors to focus on healthy public policy for seniors.

A population-wide strategy to improve health in later life focuses on conditions that will improve the well-being of all seniors. Population health concerns itself with the environments that affect people's health, the conditions that enable and support people in making healthy choices, and the services that promote and maintain health. These conditions are shown in the framework we have used to organize this document, shown in Figure 1. This framework is based on the Framework for Population Health adopted by the Federal, Provincial and Territorial Ministers of Health in 1994.

The framework shows that changes in policies and programs relating to any determinant of health will affect the health status of the population in later life. Building on the national Framework, our framework also shows two megatrends which have the potential of influencing each and every one of these determinants of health. These megatrends are demographics and economics.

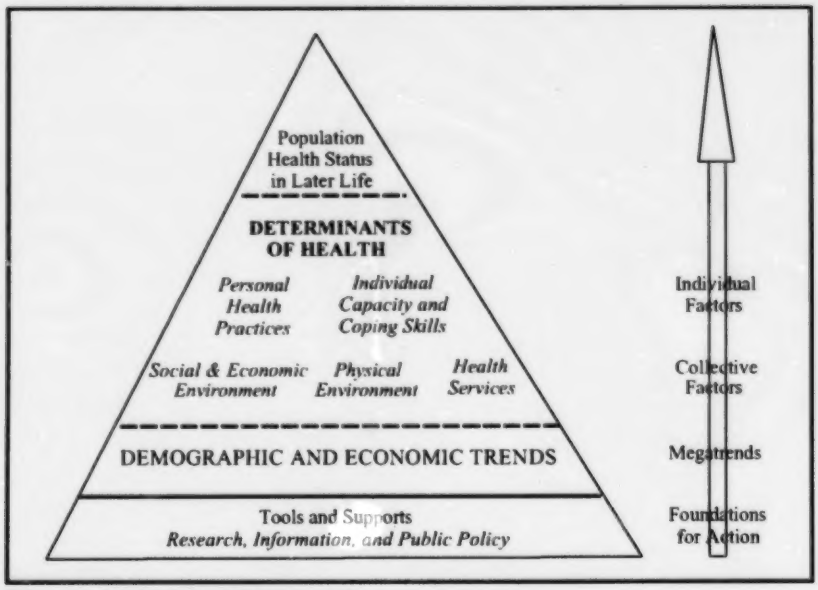


Figure 1: Conceptual Framework

Just as passing time changes the shape of our Atlantic shoreline, so does it change the shape of our population and our economy. Wind, waves and shifting sand sculpt our beaches, cliffs and coves, as population and economic changes shape the reality in which we live. The economy of the Atlantic region has experienced a slow, gradual, but relentless erosion over the past decades. The large population of aging "baby boomers" is a strong wave gradually approaching our fragile shoreline. While we cannot change this wave, we can tell when and where it will land, and there are many ways in which we can prepare for it.

The aging population and the changing economy will have tremendous impacts on all of the determinants of health, and hence on the well-being of all seniors. These two trends are not unrelated. Population aging over the coming decades challenges future growth in prosperity, and at the same time a fragile economy challenges our ability to support an aging population. While economic and demographic trends in the Atlantic region are similar to those in the country as a whole, in both cases Atlantic trends are stronger: our population is aging more rapidly, and our economy is more fragile.

The framework also shows that effective strategies for population health in later life must be built on a solid foundation of evidence about the potential impact of social megatrends, policies, interventions and programs. More research, designed to better understand how the economy and population aging will affect the determinants of health, is essential to developing public policies to guide the Atlantic provinces through the coming decades.

The study of economics and demographics -- and how they interrelate -- is highly complex, and a

thorough analysis is well beyond the scope of this document. In this paper we attempt to present an overview of the stronger trends in these areas, and then look at how these trends might impact the determinants of health and thus affect coming generations of seniors. We begin with a look at population aging in the Atlantic region, and at projections of future populations. We then look at long-term economic trends, and at how demographic changes might influence these trends. These two sections introducing the megatrends provide the background for the third section, which looks at how these trends might affect each of the three broader determinants of health: the social and economic environment, the physical environment and health services. In this section we were unable to include all the possible impacts on every possible determinant of health, and many important issues had to be left out. Instead we tried to highlight the issues that are most relevant to the well-being of future generations of seniors.

When we could, we used Atlantic region data. In some cases we used national data. Because most of the studies to which we refer have used age 65 as a marker for statistical purposes, we have used the word "seniors" to mean people aged 65 and over.

We cannot foretell the future. We can only ask questions and point out potential areas of concern. Our intent is to promote thought, discussion and more widespread planning, both in communities and across government departments. In the final section of this paper we present a brief summary of some of the major areas of concern -- areas which merit more attention throughout the region.

Governments must begin to take action now across a broad range of economic, financial and social policies to ensure the foundations for maintaining prosperity and well-being in an aging society. No single government department working alone can adequately prepare for the impact of population aging. Collaboration across many sectors is essential, along with the active support of a well-informed public. Policies in the economic, education, social services, transportation, housing and other public sectors will be of crucial importance in maintaining the well-being of the coming populations of seniors. While some planning is already under way, much broader changes will be needed to meet the challenges of population aging.

Our Aging Population

The population of the Atlantic provinces is one of the most rapidly aging populations in the world. Increased life expectancies and decreased fertility have contributed to "greying" populations. By 2036, seniors will account for one-quarter or more of the populations of most developed countries. Canada's population is now approximately 12% seniors, making it relatively young in comparison with the United Kingdom (16%) and Sweden (18%). However, over the next 20 to 30 years, population aging will shift the balance, and Canada's will be among the "oldest" populations in the developed world.[1] In 2036, 25% of the Canadian population will be 65 or over. The Atlantic provinces will have an even older population ... the country as a whole, at close to 30%.

Population aging should not be confused with the aging of individuals within the population. Individual aging is the process of development over the life span, involving biological, social and psychological changes. Every individual experiences aging differently. Population aging, on the other hand, is experienced by society as a whole. A population is said to be aging if there is an increase in the *proportion* of older to younger age groups over time, rather than a simple increase in the number of older adults. In general, population aging occurs as people live longer and births decline.

We know that the population is aging because of demography, which is the study of population structure, distribution and change. For policy purposes, governments track births, deaths and migration statistics, because taken together, these factors measure population growth.

Using assumptions about fertility, mortality, life expectancy and migration, demographers make *projections* of future populations. They often make projections for several alternative future scenarios, using varying assumptions about future fertility, mortality and immigration rates. Table 1 shows projected numbers of seniors in Atlantic Canada, based on the 1996 census, using moderate growth assumptions about the future.[2]

Because these assumptions are only estimates, demography cannot predict the future. However, demography is an important tool for identifying patterns and change across the population. Demographic information may not explain change, but it can be a powerful indicator that social change is occurring.

	1996		2011		2036	
Age	**Women**	**Men**	**Women**	**Men**	**Women**	**Men**
65-69	45,000	40,000	60,000	58,000	80,000	80,000
70-74	41,000	33,000	47,000	40,000	87,000	77,000
75-79	35,000	24,000	37,000	29,000	79,000	63,000
80+	46,000	25,000	68,000	33,000	135,000	73,000
Total	**167,000**	**122,000**	**272,000**	**160,000**	**381,000**	**293,000**

Table 1: Atlantic Region Projected Population by Age and Sex. *Source: P-MEDS*

Declining Population Growth

In recent years, the population of Atlantic Canada has been growing much more slowly than in the past. Between 1976 and 1996, the population growth rate in Atlantic Canada decreased much more sharply than did that of Canada as a whole.[3] Although three provinces experienced slow population growth between 1991 and 1996, the population of Newfoundland decreased by15,300 people. The more rapid decline in population growth in the Atlantic region is due to more people leaving the region than moving into the region. At the current rate, the population of the region will begin to decrease in the second and third decades of the new millennium.[4]

The Largest Generation of Seniors Ever

The age structure of a population can be illustrated by a "population pyramid," which is a useful way to compare the relative sizes of age groups in the population. Figure 2 shows the population pyramids for the Atlantic region, for Canada as a whole, and for the four Atlantic provinces, from 1956 to 2016.

Each horizontal bar in the pyramid represents a 5-year age group. The bottom two bars of the 1956 pyramid show the arrival of the post- World War II "baby boom," which began in 1946 and ended in 1966. By 1996, the "baby boom" generation -- then between the ages of 30 and 50 -- made up 33% of Canada's population. The pyramids clearly illustrate the impact of the "baby boom" on the population age structure: moving forward from the early 1950s, the "baby boom" resulted in the youth-dominated society of the 1950s and 60s. This effect was more pronounced in the Atlantic region, which experienced a larger and longer "baby boom" than Canada as whole. The narrowing of the base of the pyramids in the 1970s reflects the so-called "baby bust" phenomenon: the sharp drop in births that signified the end of the "baby boom."

In Atlantic Canada, the impact of the large "baby boom" generation on population aging is even greater than elsewhere because there are fewer children of "baby boomers," sometimes called the "echo generation," than in the rest of Canada. By 2016, the proportion of the age group 40-74 will be larger in the Atlantic region than in Canada as a whole, and the difference will become more pronounced in future decades as the "baby boomers" age.[5]

Over the next 10 to 12 years, the overall senior population will increase relatively slowly in the Atlantic region, because those 65 and older will be the smaller generation born between the Depression and World War II. In 1996, 12% of Atlantic Canadians were 65 and over. By 2011, when the oldest "baby boomers" turn 65, the proportion will increase to 15% of the population. Thereafter, the elderly population will grow rapidly: by 2036 the entire "baby boom" generation -- comprising nearly one-third of the population of the Atlanti provinces -- will be 65 or over (Table 2).[6]

	1996			2011			2036		
	0-20	65+	80+	0-20	65+	80+	0-20	65+	80+
NF	29.0	10.6	2.3	20.1	14.9	3.3	14.6	31.6	8.6
PEI	30.0	13.0	3.7	24.9	15.2	4.2	20.6	26.6	8.3
NS	27.5	12.8	3.2	22.3	15.6	4.4	18.6	28.3	9.0
NB	27.7	12.6	3.0	21.5	15.9	4.6	16.5	31.2	10.0
Region	**28.5**	**12.3**	**3.0**	**22.2**	**15.4**	**4.1**	**17.6**	**29.4**	**9.0**

Table 2: Atlantic Region Projected Percentages of Population 20 and Under, 65 and Over, and 80 and Over. *Source: P-MEDS*

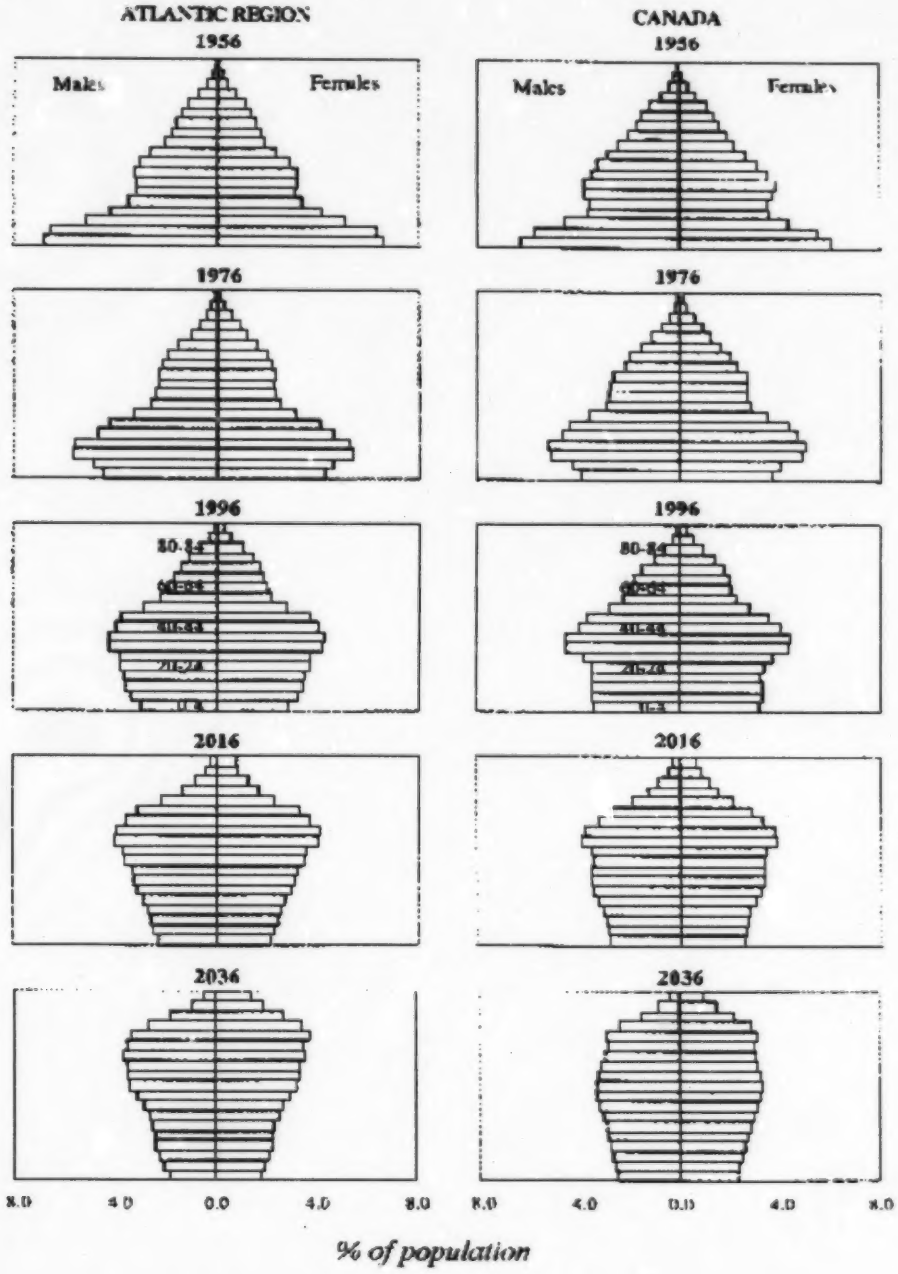
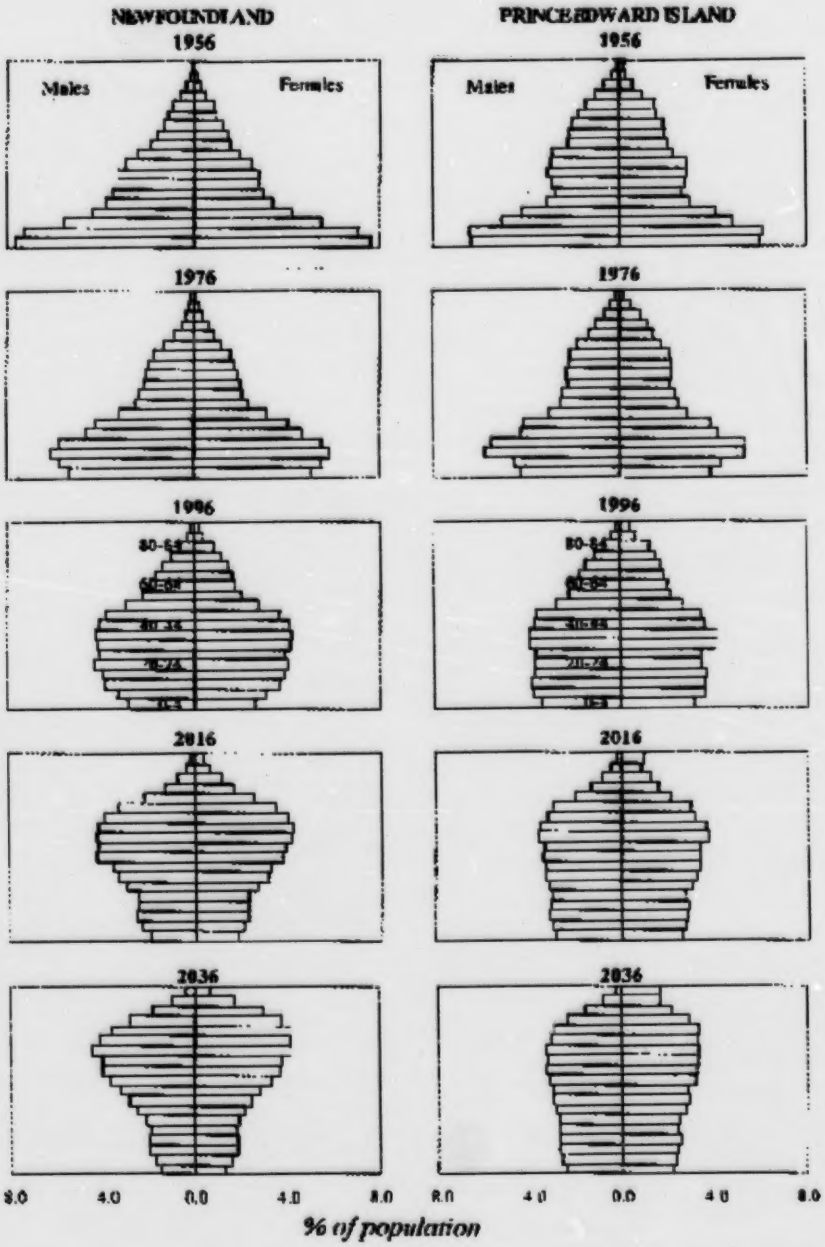
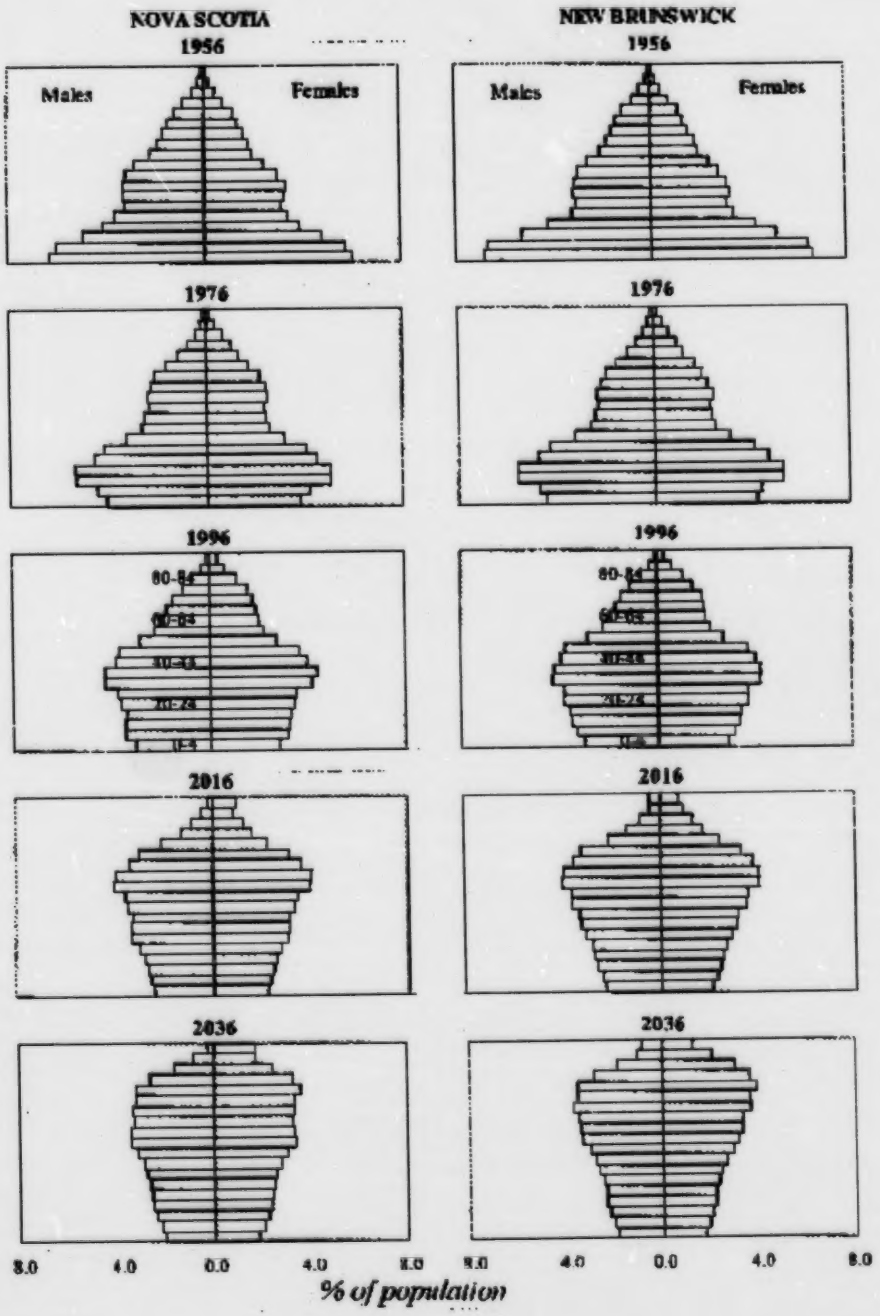


Figure 2: Population Pyramids for Canada, the Provinces and the Atlantic Region, 1956 - 2016. *Source: Atlantic Institute for Market Studies*

The horizontal bars on each side of the central line represent the % of the total population in each 5- year age group, for males and females.


NEWFOUNDLAND
PRINCE EDWARD ISLAND
1956
1976
1996
2016
2036
Males
Females
8.0
4.0
0.0
4.0
8.0
% of population


NOVA SCOTIA
NEW BRUNSWICK
1956
1976
1996
2016
2036
Males
Females
8.0
4.0
0.0
4.0
8.0
% of population

The Old are Getting Older

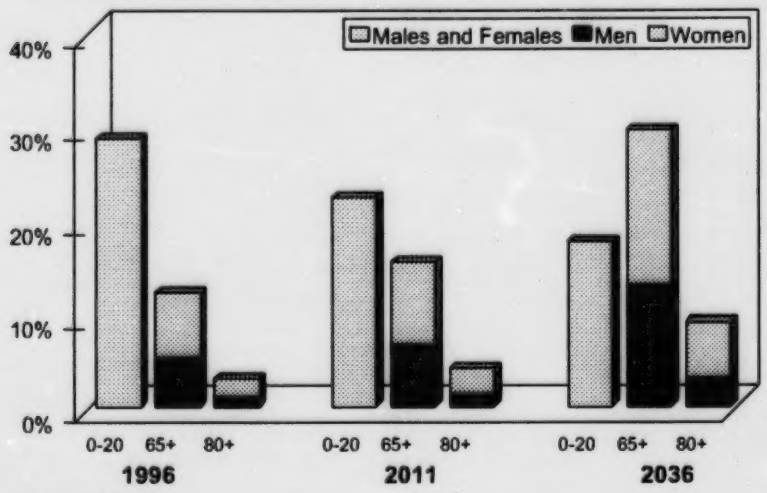
As the population of seniors grows over the next 10 to 30 years, it will also get older. The relative proportion of those over age 80 is increasing. This is sometimes called the "aging of the aged."

From 1970 to 1990, while the proportion of the over-64 population grew by about 4% in the Atlantic region, the proportion of those 80 and over nearly doubled. By 1996, 12% of the region's population was over 64 and 3% was over 80. By 2011, the over-80 group will make up 4%, and by 2036, 10% of the region's population (Figure 3). Nova Scotia will lead the region with 15% of its population 80 or older, well ahead of Prince Edward Island (8%), Newfoundland (9%) and New Brunswick (11%).[7]

During the same period, as the 80+ population grew, the under-20 population decreased rapidly, by 8% for the country as a whole and 13% in the Atlantic provinces. The decline in the youth population of the Atlantic provinces is expected to continue into the next century. This is due to a combination of sharply declining births and the tendency of many young people to leave the region in pursuit of jobs. This regional "out-migration" is led by Newfoundland, which lost 28,300 people between 1991 and 1996.[8]

In contrast, Prince Edward Island, which has a somewhat younger population, gained 2,300 people over the same five years. Prince Edward Island is the only one of the Atlantic provinces to have experienced a "baby boom echo."[9]

Figure 3: Percentage of Atlantic Region Population in Age Groups 0-20, 65+ and 80+



Source: P-MEDS

More Older Women

Figure 3 also shows that the population of women is aging faster than that of men. This effect is particularly apparent in the 80+ age group. The number of women over age 80 is growing dramatically, and has been for the past decade. This rapid increase is expected to level off by the end of the next decade. According to population projections, by 2016, 10% of the population of the Atlantic provinces will be women aged 65 and over, and 29% of these will be 80 or older. In 2036, these proportions are expected to be 17% and 35%, respectively. Men 80+ will be outnumbered two to one by women.[10] Since women outlive men on average, most women in their 80s will be single. This growing group of single, elderly women will represent an important subgroup of the aging population.

Migration and Population Aging

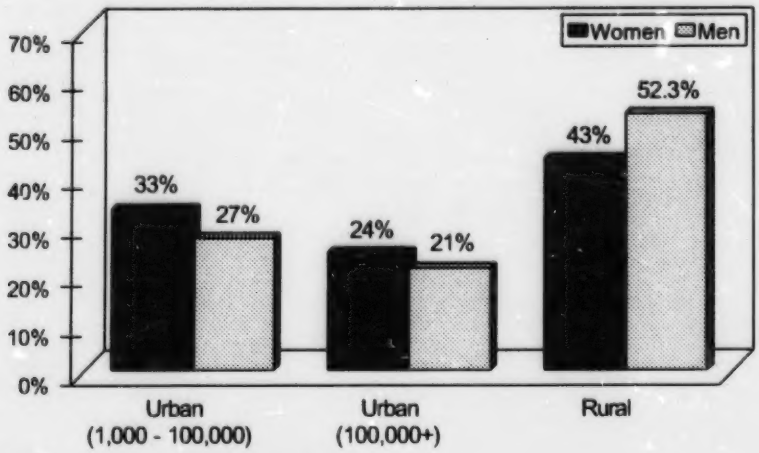
Conventional demographic wisdom suggests that if natural population growth is creating an imbalance in the population age structure, immigration can restore the balance. So, can population aging in Atlantic Canada be slowed through immigration? Probably not. Although immigrants can increase the size of the population and the work force, their numbers would have to increase to an almost impossible level to change the age balance in the population. In reality, immigrants tend to move to regions of economic strength. Historically, Atlantic Canada has attracted few immigrants, not nearly enough to replace the large numbers of young people who leave the Atlantic provinces in search of opportunities elsewhere.

The Aging of Rural Communities

The small towns and villages that make up Atlantic Canada are aging much more rapidly than the cities. While young people tend to leave small communities in search of employment, seniors are much less likely to move away. Older people generally prefer to spend their retirement years in one location. If they move, it is usually no more than a few dozen kilometres, either to be closer to services, or to children or grandchildren. As a rule, seniors are attracted to communities with a range of services; they are most likely to be found in towns and in the villages which are service centres for rural regions. The smallest centres -- those with populations between 1,000 and 10,000 inhabitants -- have the highest levels of population aging.

Roughly half of Atlantic seniors live in rural areas of less than 1,000 population. By way of comparison, in Canada as a whole in 1991, only 21% of senior men and 16% of senior women lived in rural areas.[11] Figure 4 and Table 3 show the distribution of seniors in urban and rural areas by gender in the Atlantic provinces, using 1991 Census figures.

Figure 4: Percentage of Seniors 65+ Living in Rural and Urban Areas in Atlantic Canada



Source: Statistics Canada - Census 1991

	Pop. Total (000)		Pop. 65+		% Urban		% Rural	
	Women	Men	Women	Men	Women	Men	Women	Men
NF	284.6	283.8	30.3	24.9	57.4	50.2	42.5	49.8
PEI	65.8	64.0	9.7	7.3	53.0	41.1	47.0	58.9
NS	458.3	441.7	65.8	47.7	59.0	50.2	41.0	49.8
NB	366.7	357.2	50.7	37.5	58.5	49.4	41.5	50.6
Region	**1175.4**	**1146.7**	**156.5**	**117.4**	**57.0**	**47.7**	**43.0**	**52.3**

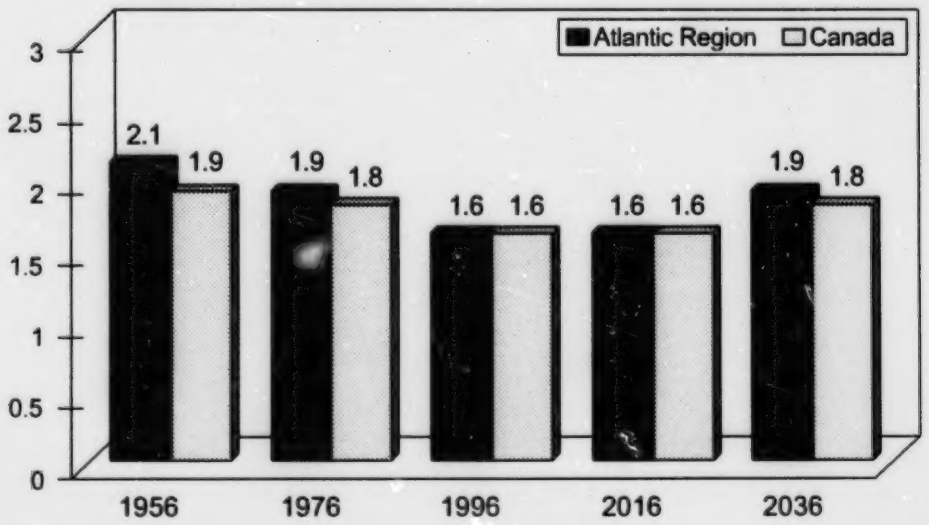
Table 3: Urban/Rural Seniors (65+) in the Atlantic Provinces, 1991.
Source: Statistics Canada, 1991 Census

Dependency Ratios

Much concern has been expressed that the demand for services created by population aging will exceed society's ability to provide. Demographic calculations indicate that this may not be true. One simple but crude way of estimating the impact of population aging is to compare the size of the entire population to the population of working age (20-64) which is responsible for the bulk of economic output and tax dollars. Demographers call this measure the population "dependency ratio."

The population dependency ratio for the Atlantic provinces has declined over the past 40 years. The ratio was highest in 1966 at 2.2, when the "baby boomers" were all children, entirely dependent on society. Currently, with "baby boomers" all in the "providers" age group, the population dependency ratio is very low, at 1.6 (1996). The dependency ratio is expected to change very little in the next 15-20 years, and then increase to 1.9 in 2036, as "baby boomers" leave the work force. However, the population dependency ratio is never expected to be as high as it was between 1951 and 1966 when the "baby boomers" were children.[12] Figure 5 shows the dependency ratios for the Atlantic region and Canada, from 1956 projected to 2036.

Figure 5: Dependency Ratios for the Atlantic Region and Canada, 1956 - 2036



This rough estimate should help allay some of the concerns associated with an aging population. It suggests that while the total cost to society (public and private) of a larger population of seniors will increase, the total cost of supporting a smaller youth population will decrease. The challenge will not be, as often stated, in managing the cost of an aging population, but rather it will be in managing the gradual shift from spending on youth to spending on seniors. This challenge is compounded by our tradition of meeting more youth needs through private spending within the family, while meeting more of

seniors' needs through public spending on government services. While many parents do not hesitate to spend lavishly on their children, they are more reluctant to pay higher taxes. Meeting the challenge of population aging will therefore require an overall change in how the general public views taxation and public spending.

Even though the dependency ratio suggests that the overall costs of population aging should be manageable, the Atlantic Canada ratio will be higher than that of Canada as a whole. There will be a smaller working population and a larger retired population here than in the rest of the country, indicating that population aging will be a greater challenge here than in other regions.

		1996		2011		2036	
Newfoundland	Age	Women	Men	Women	Men	Women	Men
	65-69	9,000	9,000	14,000	13,000	18,000	18,000
	70-74	8,000	7,000	10,000	9,000	19,000	16,000
	75-79	7,000	5,000	8,000	6,000	17,000	13,000
	80+	8,000	5,000	11,000	6,000	24,000	14,000
	Total	560,600		516,700		443,400	
PEI	Age	Women	Men	Women	Men	Women	Men
	65-69	3,000	2,000	3,000	3,000	5,000	5,000
	70-74	2,000	2,000	3,000	2,000	5,000	4,000
	75-79	2,000	1,000	2,000	2,000	4,000	4,000
	80+	3,000	2,000	4,000	2,000	8,000	4,000
	Total	136,200		144,100		145,100	
Nova Scotia	Age	Women	Men	Women	Men	Women	Men
	65-69	18,000	16,000	24,000	23,000	32,000	32,000
	70-74	17,000	13,000	19,000	16,000	35,000	32,000
	75-79	15,000	10,000	15,000	12,000	32,000	26,000
	80+	20,000	10,000	30,000	13,000	59,000	28,000
	Total	931,200		976,300		976,500	

	Age	Women	Men	Women	Men	Women	Men
New Brunswick	65-69	15,000	13,000	19,000	19,000	25,000	25,000
				15,000	13,000	28,000	25,000
	70-74	14,000	11,000				
	75-79	11,000	8,000	12,000	9,000	26,000	20,000
	80+	15,000	8,000	23,000	12,000	44,000	27,000
	Total	753,000		764,800		706,300	

Table 4: **Projected Population by Province.**[13] *Source: P-MEDS*

Our Changing Economy

No matter how much is spent on health care, the healthiest populations are those in societies that are prosperous and have a narrow gap between the rich and the poor. The wealth of a region and the way the wealth is shared affects all the conditions which lead to health.

In the three decades after World War II, economic growth in the region was rapid, unemployment was low, incomes rose steadily, and governments expanded social programs. More recently though, economic conditions have not been so prosperous. Although we have experienced alternating periods of recession and recovery, over the last three decades the overall economic trend in the region has been characterized by increasing debt, inflation, unemployment, decreasing growth in productivity and a growing inability to afford desired levels of government services. This economic downturn was experienced by most Western countries. More recently, the gap between the rich and the poor also appears to be growing, providing less favourable conditions for healthy aging.

Globalization

As the global economy becomes more and more integrated, Atlantic Canada faces new opportunities and new challenges. Businesses have easier access to ever-increasing world markets, but at the same time competition is increasingly fierce. To realize the benefits of globalization, businesses must be highly competitive and must find a way to manage the challenge of intense international competition. In the years since the North American Free Trade Agreement, Atlantic Canada's trade with the United States has grown rapidly. International exports have increased more than 50% in four years.[14] Even so, the Atlantic region has not achieved the increase in volume and diversity of exports that other regions of the country have experienced.[15]

Changing Economic Base

Historically, the Atlantic economy was based in rural communities and on natural resources such as the fishery, forestry, mining and farming. Reduced cod stocks have devastated the cod fishery, which fueled the economy for many coastal communities. Overall, resource-based industries have not done well recently, and the long-term outlook is poor. People and communities are hit hard as jobs are lost in these traditional industries. Although many new jobs have been created in the knowledge and service industries, the transition to this new economic base is not a smooth one. The new industries are more often located in urban areas, and require higher education than the resource-based jobs they are replacing. The economic isolation of rural communities is increasing as economic activity and jobs move to urban and suburban centres. This economic reality is the main cause of the more rapid aging of rural communities.

Weak Economic Growth and Productivity

Economic and productivity growth have been declining since the 1960s, both in the region and across the country. The Atlantic region's real GDP per person stagnated in the 1990s after a period of slow but steady growth in the 1980s. Throughout the 1990s, real GDP per person in the region has been 75% of that of Canada as a whole. Some of this economic slowdown can be attributed to reduced growth in productivity, which is the amount of work produced per worker.

The oil and gas sector is keeping the region's current overall economic outlook positive. The region, Nova Scotia and Newfoundland in particular, may lead much of the national economic growth in the next year or two. Beyond this positive short-term forecast, however, there is a potential for a slow down or even a recession in Atlantic Canada in the near future. GDP growth in the Atlantic region is expected to lag behind the rest of the country over the next two decades.[16] Figure 6 shows a projection of GDP growth to the year 2020.

Increasing Unemployment

Average unemployment rates in Canada have been growing steadily with each passing decade, from close to 3% in the late 1940s, to 5% in the 1960s, and closer to 10% in the 1990s. Workers are

experiencing longer and growing periods of unemployment, from an average of 12 weeks in the 1970s, to 18 weeks in the 1980s, to more than 22 weeks in the 1990s. The average duration of unemployment periods for men aged 45-64 more than doubled between 1975 and 1994.[17]

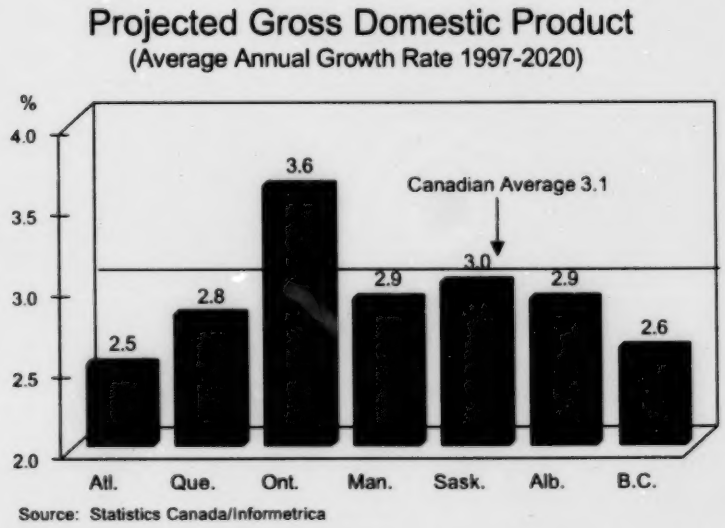


Figure 6: Projected Average Annual GDP Growth Rate, 1997 - 2020.

In Atlantic Canada, average unemployment rates are generally a third to a half greater than in the rest of Canada, and twice as high in Newfoundland. Unemployment is especially high in rural areas and among youth, older workers and those with less formal education. Unemployment rates in rural communities are up to three times higher than those in Halifax, which has one of the country's lowest rates. Unemployment among older resource workers has soared, and future employment prospects for those with limited reading and writing skill are limited. Jobs for professionals and managers have increased significantly, while clerical and processing jobs have become more scarce. Between 1992 and 1997, more than 52,000 jobs have been lost for Atlantic Canadians without a post-secondary education. During the same period, more than 91,000 jobs were created for those with post-secondary school education.[18]

Fewer Working Men, More Working Women

Participation in the work force has also been changing. The number of men, especially older men, working or looking for work has been dropping steadily since the 1970s. Early retirement is becoming more common. In 1976, close to 77% of Canadian men aged 55-64 were in the work force; by 1997, participation was down to 61%. This partly reflects some of the challenges faced by these workers: their work experience is often in declining industries, their literacy and education levels are lower and they are less mobile due to home ownership and family commitments. The introduction of government pension plans in the 1960s, the greater availability of private pension plans, and attractive retirement packages have also encouraged many men to retire.[19]

Over the same period, the number of women in the work force has increased steadily. By 1997, close to 80% of younger women, and more than 70% of women aged 45-54, were in the work force. The participation rate for older women, however, has remained relatively stable at around 34%.[20]

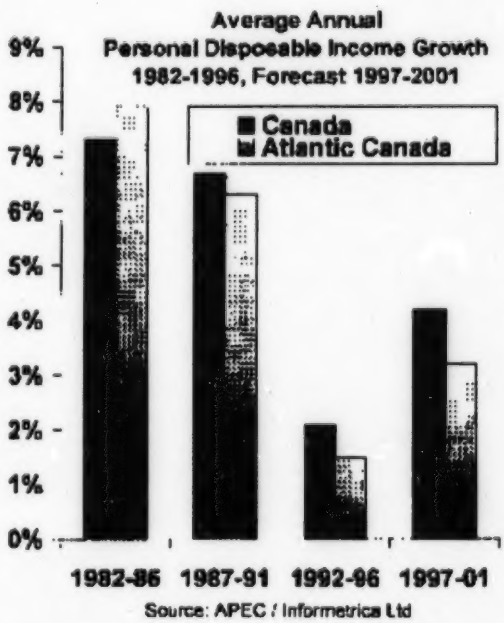


Figure 7: Average Annual Personal Disposable Income Growth, Atlantic Region

Decline in Regular, Full-time Government Jobs and

Over the last 20 years, regular full-time jobs have declined, while casual, part-time, contractual and self-employment has been on the increase. This trend is strongest among older men. Self-employment has accounted for 80% of

the overall employment growth in Canada since 1989.[21] Jobs are also moving from the public to the private sector. Since 1993, 13,500 public sector jobs were lost in Atlantic Canada, while 44,300 were created in the private sector.[22]

With this shift in type of employment come lower incomes and reduced access to work-related benefits. In 1980, 54% of working men had access to private pension plans; by 1993, only 47% did so. Today, just over half of unemployed Canadian workers are covered by the employment insurance system, whereas nearly all were covered in 1990.[23] With each passing decade, fewer workers have been covered by labour unions.[24]

Declining Income Growth

During the 1960s and 70s, families looked forward to regularly increasing incomes. Since the early 1980s however, this is no longer the case, and average family incomes have stagnated. Between 1990 and 1995, the average family income in Atlantic Canada dropped by $2,500 in constant 1995 dollars.[25] Figure 7 shows that growth in disposable income in Canada and the Atlantic region has also declined considerably, but it is expected to begin to grow more rapidly in the current period.[26] Personal savings rates in the region have declined dramatically from approximately 10% in 1992, to close to zero in 1997, and personal debt remains at a record high level.[27]

Increasing Economic Inequality

Since the mid-1970s, the real employment earnings of people with the lowest salaries in the region have been dropping steadily. At the same time, earnings for those with the highest salaries have continued to rise. These diverging trends have given rise to an increasing gap between the rich and the poor. Inequality in earnings has grown across the country, but according to 1994 statistics, this gap is largest in Atlantic Canada.[28]

Increasing economic inequality also exists between older and younger workers: while workers under age 35 are experiencing lower wages, reduced work hours and more frequent periods of unemployment, middle-aged workers have been working longer hours for better pay. This trend has also been observed in the United States, even during periods of rapid economic growth. There is some concern that this inter-generational inequality may undermine social cohesion in communities with large proportions of retired people who have stable incomes.[29]

ECONOMIC CONSEQUENCES OF POPULATION AGING

Economic and demographic trends are closely related. Much is already known about trends in both areas, but more analysis is needed on the impacts of population aging on the economy, and on the implications for future economic and social policy. Although it is impossible to predict the many impacts population aging will have on the economy of the region, there has been much speculation about some expected changes, and some of these are summarized below. Population aging will no doubt also bring new and unforeseen economic opportunities.

A Smaller Tax Base

Seniors pay taxes until the day they die. Even so, the working age population contributes the bulk of tax dollars. As ever greater numbers of people retire, the tax base from which governments draw revenue will be diminished. The first of the "baby boomers" will turn 60 in 2008. We can anticipate that after that time, revenue from income taxes will decline and governments will increasingly rely on other forms of taxation.

Reduced Demand for Goods and Services

The demand for goods and services fuels the economy. As we saw when the "baby boomers" set up households 20 years ago, the demand for food, clothing, housing, furnishings, schools and recreational facilities is greater with a younger population. While industries that cater to the needs of young families may suffer as the population ages, new industries aimed at catering to the needs of an older population will flourish. Even so, older people tend to save more and spend less than younger adults. While younger people tend to borrow money, older people tend to lend it, and are more likely to invest in stocks and bonds. The overall demand for consumer goods is not expected to return to the levels experienced in the 1960s and 1970s, and our economy will rely ever more heavily on selling to export markets.

A Smaller Work Force

Population aging will have profound effects on the size of the work force, and there is much concern that this will reduce the productive capacity of the region. To compensate for a smaller work force, each worker will have to be more productive. The Atlantic work force has been growing more slowly than that of the country as a whole in recent years, and that of Newfoundland has been decreasing. If current trends in the region continue, New Brunswick's work force will begin to decline between 2006-2011, and all four provinces will begin to experience declining work forces between 2011-2016.[30] This trend should lead to considerable pressure to keep more older workers in the work force, reversing the recent trend to earlier retirement. A recent report indicates, however, that there is as yet no evidence that aging societies suffer reduced productivity growth.[31]

Economic trends, like demographic trends, suggest that Atlantic Canada's adjustment to an older population will be more challenging than in the rest of the country. According to projections made with Canadian data, maintaining even modest economic growth with a smaller work force will require very large increases in productivity.[32] This suggests that maintaining economic growth and maintaining health and social programs will be even greater challenges in the Atlantic region, where the work force is

expected to be smaller and productivity lower than in Canada as a whole.

The Outlook for the Well-being of Seniors

The aging population and the changing economy will have many different impacts on the factors and conditions that affect seniors' well-being. Below we look at some of these conditions and speculate on how these megatrends will change the reality for future generations of seniors.

THE SOCIAL AND ECONOMIC ENVIRONMENT

Social and economic environments are shaped by education, employment, income and social status, and social support networks. In this section we will look at each of these, and how they might be altered by economic and demographic trends.

Education

Education provides opportunity for income and job security, and equips people with a sense of control over life circumstances – key factors that affect health. Health status increases with level of education. Lower levels of education and literacy are associated with poorer health, institutionalization and greater dependency in later life. There is also a strong relationship between education level and low income. Seniors who did not finish high school are more than twice as likely to live in poverty than those who have some post-secondary education.

What more can be done to make all health and social programs more accessible for people with low literacy?

Today's seniors have more formal education than any generation of seniors that came before them, and future generations of seniors will have even higher levels of education and literacy. There is a marked difference in literacy and levels of formal education between people who were educated before and after World War II. Today's seniors, who completed their education before World War II, did not benefit from the universally accessible education system that was introduced in the 1950s. Approximately 78% of Atlantic seniors have not completed high school.[34] More senior men than women have higher education. In the International Study of Adult Literacy, nearly six out of every 10 (58%) Canadian seniors who participated were ranked

at the lowest of five levels of literacy. In addition, overall literacy was lower in Atlantic Canada than in the country as a whole.[35]

Are literacy programs accessible for seniors who want them?

The population that will turn 65 during the next decade was also born before universal access to education. For this next wave of seniors who will turn 85 in 20 years, both education and literacy levels are higher but still relatively low. Low literacy will therefore be a challenge for many seniors for many years to come, making it difficult to read instructions on medicine bottles, fill out forms, calculate change, use the phone book and learn about and apply for social support programs.

The next wave of seniors, coming of age in the second decade of the new millennium, will consist of the postwar "baby boomers" who had greater access to the education system. This population of seniors will have had substantially higher education and literacy levels, and the education gap between men and women will be much smaller. Greater education attainment for these older women will probably be reflected in higher lifetime earnings and pension benefits. These seniors may be more receptive to health promotion and prevention messages, and more able to navigate the health and social support systems.

How can we create a culture of lifelong learning? What is the role of employers, families and public institutions?

Employment and Retirement

Employment affects health in a number of ways. Workplace stress, hazards and injuries are significant causes of health problems. Conversely, employment contributes to self-esteem and provides social interaction with co-workers. Unemployment is associated with anxiety, psychological distress and physical health problems. In later life, the more active older people are, the better the quality of life they enjoy. Unpaid work provides some of the social benefits of employment for many retirees. There is some evidence that involuntary retirement leads to poor health after retirement.

What are the social costs and benefits of early retirement?

Most seniors are retired. While some people choose to retire, others are forced to do so against their will by illness, layoff or business failure. The average age of retirement in Canada has fallen from 65 in 1976, to 62 by 1996. This trend to earlier retirement, if not reversed, will pose a serious challenge for the economy as "baby boomers" move out of the work force.

Should the age of retirement increase with increasing life expectancy?

Of seniors who are still doing paid work, more than half are self-employed, and nearly half work part-time. In 1997, the participation of seniors in the work force ranged from 3% in Newfoundland to 11%

What is the social and economic value of the unpaid work of seniors?

in Nova Scotia.[36] Although few seniors are doing paid work, many still devote considerable time to unpaid work, including housework, volunteer work and helping others. These activities provide seniors with the social interaction and sense of self-worth that are often provided by employment.

Will retired "baby boomers" be as ready to volunteer and help others as our current generation of seniors?

Older seniors living in their own homes are more likely to volunteer their time to organizations than to receive services as clients. More than half of older men and women over age 75 regularly help others with activities such as house work, yard work, meal preparation, grocery shopping, driving and babysitting. Many seniors also do formal volunteer work, donating about half an hour a day to these activities.[37] Seniors contribute to families, communities and to the economy. A recent Nova Scotia study valued volunteer work by all ages as contributing $2 billion a year to the economy of the province.[38]

What are the barriers to employment of older workers and how can they be reduced?

The population that will turn 65 during the first decade of the new millennium will have experienced a much more erratic transition to retirement than did previous generations. The poor economy, restructuring and downsizing experienced in the 1980s and early 1990s have led to job loss and early retirement for many older workers. Their transition from career to retirement is more likely to include a series of short-term, casual or part-time jobs, often accompanied by reduced income and social status. The traditional career pattern experienced by the men who are seniors today provided stable work, pension plans, health insurance and promotions based on seniority. The more erratic career patterns experienced by older workers in today's economy may provide more stress and less financial security when they reach old age.[39]

What public and workplace policies support gradual and flexible transition to

The next wave of seniors, coming of age in the second decade, will consist of the postwar "baby boomers," whose work experience may not be as difficult as those who retire immediately before them. These workers have had more education and ongoing training, and are more comfortable with computers and work-related technology, than are today's older workers.[40] As the work force shrinks due to population aging, "baby boomers" are expected to be in high demand in the work force even into their 60s, and will be much less likely to be forced into retirement. While more and more "baby boomers" say they want to retire early, their retirement will cause increasing labour shortages, which may well result in incentives to remain in the work force beyond age 65. "Baby boomers" will want a variety of flexible options to keep them in the work force longer, including more gradual transitions from

work to retirement.

Income and Social Status

Many studies have shown that income and social status are the most important conditions for health, and that health increases at each step up the income and status ladder. Feelings of low self-esteem, powerlessness and uselessness can undermine determination to care for oneself. Many factors can contribute to low feelings of self-worth, including social isolation, ageist attitudes, forced retirement and a lack of family and community support.[41]

By their sheer numbers, the "baby boomers" have dictated social norms and concerns from their earliest years, through their teens, as they set up households, and now as they reach mid-life. There is some reason to expect that they will continue to do so as they reach retirement years. There has never been a generation of seniors as well-educated and literate as those who will become eligible for seniors benefits in just a dozen years. As their numbers swell the ranks of the voting public, governments will become more accountable to seniors. Older people may be seen in a more positive light, making their social environment a much more supportive one.

The financial status of senior citizens has improved dramatically over the last 20 years. Their incomes have risen more quickly than those of younger people, whose incomes remained relatively stable over the same time period. Because of improved private pension plans, seniors' benefits and taxation policies, seniors have seen a significant reduction in poverty rates. Even so, poverty among older people still exists, and although it is still at record low levels, there is some evidence that the economic circumstances of seniors deteriorated slightly in 1996. Fifteen percent (15%) of seniors in Atlantic Canada live in poverty as defined by Statistics Canada's low-income cutoffs. Only 5.4% of senior couples live in poverty. Thirty-seven percent (37%) of unattached senior women are poor, and 19.2% of unattached senior men. Nationally, poverty rates among older people are lowest in Atlantic Canada, possibly due to higher rates of home ownership.[42]

What policies are needed to reduce the profound income disparities within the senior population?

Clearly, seniors' incomes are very much related to age, gender and marital status. Women living alone are almost seven times more likely to have low incomes than are those living with a spouse.[43] One-third of people over age 75 who are not living in institutions are women living alone, and 40% of these live below Statistics Canada's low-income

cutoff. Because many of these women did not work outside the home, they are less likely to receive Canada Pension Plan benefits, and are unlikely to receive income from private pensions.[44]

In 1996, half of Atlantic Canada families headed by a senior had incomes below $27,400. Half of seniors living alone had incomes below $14,200. Despite relatively low incomes, one national survey found that 85% of seniors said their incomes and investments met their current needs adequately or very well. Those with personal incomes less than $10,000 were as likely to say they were very satisfied with their lives as those with incomes of more than $40,000.[45] This satisfaction with low incomes may be due to low-income cutoffs that overstate the actual level of hardship for seniors. The measure of low income does not take into account home ownership and other accumulated wealth. Seniors also pay somewhat less in taxes than younger people, and are able to claim cost reductions on some goods and services.

There are no accurate measures of savings and wealth in Canada. A number of studies suggest that older households continue to save at substantial rates after retirement, except for households with the lowest income. Both the rate of saving, estimated at approximately 11%, and total assets continue to increase, at least until age 70-74.[46]

On average, Canadian senior couples receive about 40% of their income from government pensions and benefits and 60% from private pensions, investments and earnings. Senior women who live alone rely on the government for 62% of their income. While men are more likely to have a private pension, government pensions are the major source of income for women over age 75. Low-income senior citizens rely much more heavily on government benefits. In 1996, government transfers were the *only* source of income for nearly half (44%) of senior women, whereas that was the case for only one out of five (22%) senior men.[47]

Living alone does not automatically mean an elderly woman will live in poverty. Many women can draw on income from a deceased husband or ex-husband, and at age 65 receive Old Age Security. The women most likely to be financially insecure are those who cannot collect Old Age Security benefits because they are not yet 65, have never been in the work force and do not have a spouse.[48]

Can "baby boomers" count on income support programs to be there when they retire?

There is some concern that the working population will not be able to provide social security benefits at current levels when "baby boomers"

turn 65. Although seniors have contributed to their pension and income support programs throughout their working years, this money was never set aside for them, it was spent to provide pensions and income security for seniors then. Today's contributions are used to pay out today's benefits, and tomorrow's contributions will have to pay for tomorrow's benefits. To prepare the Canada Pension Plan for a much older population, the 1997 federal Budget announced an increase in contributions to build up the Plan, and the possibility of somewhat reduced future benefits is still under discussion. In 2040, total employer-employee Canada Pension Plan contribution rates are expected to be 14.2%.[49]

The population aged 85 and over is the fastest growing age group in Canada today, and is expected to double in the next 30 years. Close to one-third of these are likely to be women living alone. This large population of women, whose average lifetime education and income levels are relatively low, and who will have limited access to government and private pension plans, is at high risk of financial insecurity.

The population that will turn 65 in the next decade will be somewhat larger than the generation before them, and may be slightly better off. This generation was in the work force during prosperous economic times when employment was more available, and work-related pensions and benefits were more widespread. More will have had an opportunity to build up their savings for retirement.

Because women in this group of seniors will have been more active in the work force, more of them will have access to pension plans than those who came before them, and the gap between the retirement pensions of men and women should begin to narrow. However, these women are still less likely than men to have contributed to a private work-related pension plan. Many have not been active in the work force, and of those who have, many work part-time, and in sectors of the economy where pension coverage is low.

"Baby boomers," who will come of age in the second decade, may be somewhat better financially prepared for retirement than were the current generation of retirees. One study revealed that they are more likely to have contributed to an RRSP, to have paid off or avoided debt and to have made other investments than are people who are now retired.[50]

This generation of women has been much more active in the work force than the previous generation. Their access to pension plans has increased significantly. In addition, as women's salaries have increased, so has the value of their pension plan contributions, which will further narrow the gap between the retirement incomes of men and women.

How can we reduce the growing gap between the "haves" and "have-nots," and enable everyone to adequately save for retirement?

However, recent economic trends and the growing economic inequality experienced by this generation may enable only some people to save for retirement. With the shift to non-standard forms of employment come lower incomes and reduced access to work-related benefits. The poor economy in the 1990s has sharply reduced personal savings rates and increased personal debt in Atlantic Canada. In 1997, both the number of people who contributed to RRSPs, and the total amount they contributed, declined in the region.[51]

As work-related pension plans become less available, personal savings and RRSPs will make up an increasing share of retirement incomes. Between 1991 and 1995, just over half of Atlantic Canada taxpayers aged 25-64 saved for retirement through a retirement savings plan. The greatest contributors to retirement savings plans are higher-income males, aged 45-54. People with lower incomes (which includes more women and young people), are less likely to save for retirement, and if they do, they save less. Only about one-third of those in the $20-30,000 income range saved for retirement every year.[52] There is also some evidence that people in poor health are less likely to prepare financially for later life.[53]

The economic security of tomorrow's elderly will be determined by our ability to address poverty and inequality today. The disparity in earnings, benefits and employment opportunities between men and women, and between those who "have" and those who "have not," will determine whether or not "baby boomers" and the generations to follow will be able to adequately save for retirement.

Being financially prepared for retirement depends on public programs as well as personal financial planning. The decisions that people make about their futures are based on the health and social programs in place today. If pensions, seniors' benefits and health services are reduced, then the seniors of tomorrow will not be prepared financially to maintain their independence and to cover the costs of health care. The fact that nearly half of taxpayers have neither a private retirement plan nor an RRSP suggests that many "baby boomers" will be as reliant on

social support systems for their retirement income as were their parents, and the social safety net will be just as important for seniors in 30 years as it is today.

Do existing programs and policies strengthen the capacity of families, friends and communities to provide support for seniors?

Social Support Networks

The more social participation and emotional support people have, the lower their premature death rates. Some experts believe that the health effects of social relationships may be as important as risk factors such as smoking, fitness and obesity. Seniors who are not married, or who live with non-relatives, are at greater risk of poor health and institutionalization. Social isolation in seniors is linked to poor mental health and to medication and alcohol abuse.[54]

Spouses and children are the main sources of emotional support for most older adults.[55] The support of a spouse is one of the most important contributors to the quality of life of seniors. However, in this respect, the lives of older men and women are quite different. In Canada, while more than two-thirds of older senior men are married, two-thirds of older women are widowed. Only 10% of older senior women live with their husband. Half of women over age 75 live alone, nearly three times the rate for men.[56]

How can programs and policies promote greater social integration and interaction of seniors?

Although most seniors have had several children, they tend not to live with them. In 1995, only 12% of Canadian seniors lived with their children, either in their own households or as part of an extended family. Fewer than half of seniors see at least one child at least once a week.[57] In 1991, one-third of older senior women who lived alone said their closest family member lived in another town, and close to half said they had either one or no family members and friends to whom they felt close.[58] Contact with brothers and sisters is even less frequent. Most older Canadians have relatively little personal contact with siblings.[59] Roughly one-third of all seniors said they have no close friends.[60]

What policies and programs will strengthen social support networks for seniors in isolated rural communities?

The proportion of senior women living alone has been increasing rapidly over the past 20 years, and is expected to reach 42% nationally in 2011. At the same time, rates for men have remained relatively stable over the years.[61] However, seniors in Atlantic Canada are less likely to live alone than are seniors in the country as a whole. Newfoundland seniors are least likely to live alone. The proportion of older Newfoundlanders living in other people's homes was nearly

twice the national average.[62]

As the population ages, longer life expectancy means that four and even five generations can co-exist in a single family, providing greater opportunities for inter-generational interaction. In the Atlantic region, however, these generations are often separated by distance, as children move to urban areas or other provinces to look for employment.

Divorce, the economy, smaller family size, increasing geographic mobility and women's increasing participation in the work force will further reduce the number of family members available to provide emotional support to aging parents. This suggests that the weak social support networks experienced by many older adults today may be even weaker in the future, leaving many more at risk of social isolation and the resulting health consequences.

THE PHYSICAL ENVIRONMENT

Do existing standards for air and water quality reflect the increased vulnerability of an older population?

The natural environment and the environments we have built around us provide the physical contexts for our survival, our livelihoods and our day-to-day activities. Natural ecosystems, air and water, forests, fisheries, energy sources, physical shelter, roads and transportation systems, industrial operations and workplaces have direct and profound impacts on health and well-being.

The Natural Environment

Are savings from cutbacks in snow removal and sidewalk maintenance worth the far greater costs of long-term health care for injured seniors?

Seniors and young children are the most sensitive to a variety of environmental influences, such as air pollution and the extreme weather conditions associated with global warming. Population aging will increase the size of the at-risk population for air pollution, intense heat and cold and snow and ice storms. Energy use may grow due to increased demand for air conditioning and heating.

Cutbacks in municipal spending have resulted in reduced winter sidewalk maintenance in some communities. Icy sidewalks can contribute to the inactivity and isolation of seniors, as well as injuries that can have serious and lasting consequences for seniors and for the health care system.

Seniors are also affected by the collapse of natural resources such as the cod fishery. The decline in natural resources which provided the economic base for rural communities is transforming the entire region.

Coastal communities are becoming "grey" as young people leave to pursue livelihoods elsewhere. Successful community economic development may reverse this trend in some communities; in others, the trend is likely to continue as the population ages and economic activity shifts to urban centres.

What are the barriers to seniors living at home and how can housing policies minimize them?

Housing

Shelter is a basic need, and housing adequacy, accessibility and affordability influence the health and well-being of older people. In the Atlantic region, home ownership is higher than in the rest of the country, and highest in Newfoundland where close to 82% of families own their own homes. Well over two-thirds of Atlantic seniors own their own homes, and 90%[63] are mortgage free.

Unattached seniors are more likely to rent than are married seniors. Fewer than 8% of Canadian seniors live in collective dwellings including rooming houses, hotels, hospitals and long-term care facilities.[64] Atlantic Canada, with Newfoundland in the lead, has the lowest proportion of seniors living alone and the highest proportion living in others' homes.[65]

How can municipal housing policies facilitate the development of a greater range of options for housing seniors ?

Older people consider location, design and facilities when choosing where to live. In general, they prefer to live close to key services such as shopping and public transportation. Seniors also prefer housing that offers personal security. Housing options that support seniors' independence include "granny flats," home sharing, congregate housing, emergency response systems, home-equity conversion plans, accessibility modifications to existing homes, retirement communities and facilities that offer a continuum of accommodations and services from meals in communal dining rooms to full-time nursing care.[66] A range of choices will be the key to meeting the housing requirements of diverse seniors, from active, well-off younger seniors to the very old, frail and financially insecure.

As the population ages, housing demand in the Atlantic provinces is likely to change. In the next decade more publicly funded and subsidized housing will be essential to meet the needs of the rapidly growing population of very old, single women, many of whom with low incomes.

What models exist for supportive housing for people with disabilities and in the early stages of dementia?

"Baby boomers," who will begin to turn 65 in 15 years, may have lower rates of home ownership than did their parents and grandparents. Greater economic inequality, together with demographic trends which show "baby boomers" moving to urban areas in search of employment, may make it more difficult for this coming wave of seniors to purchase their own homes. This may lead to greater problems of housing and financial insecurity for tomorrow's seniors than is currently the case.

When "baby boomers" reach old age in 30 years, the dramatic increase in numbers of very old adults will result in increased need for supportive housing for seniors with disabilities and in the earlier stages of dementia.

What are the barriers to public transportation in rural areas and how can they be reduced?

Transportation

Transportation allows seniors to maintain social relationships, avoid dependency and keep a sense of control over their lives. In 1991, two-thirds of senior Canadian men had drivers' licenses, and 75% reported that they drove more than three times per week. In contrast, fewer than one-quarter of senior women had drivers' licenses, and of those, nearly two-thirds said they drove more than three times per week.[67]

Seniors are the heaviest users of public transportation. Where it is available (mostly in urban areas), many seniors depend on it to remain independent and maintain their day-to-day routines. In rural areas and small communities where public transportation is not available, seniors are more dependent on others and are more likely to be physically and socially isolated.

How can we support older drivers and reduce the risk of unsafe driving practices?

Over the next decade, as the over-80 age group continues to grow rapidly, the need for public transportation is likely to grow as well, and is expected to remain high in subsequent decades as "baby boomers" age. In 20-30 years, roads will become increasingly populated by seniors. More senior women will be able to drive than is the case today, thus reducing the physical isolation of older women.

Although age itself does not reduce ability to drive, increased age

does increase the probability of diminished hearing, vision and reflexes, conditions which do affect driving skill. Flexible, low-cost and convenient alternative means of transportation will encourage those with diminished driving skills to avoid driving. As "baby boomers" reach old age in 25-30 years, the proportion of seniors with drivers' licenses will diminish, and seniors will become even more reliant on neighbours and public transportation to remain socially active and contribute to their communities.

HEALTH SERVICES

Health services designed to promote health and to prevent and treat disease play an important role in keeping seniors healthy. Hospitals, doctors and nurses are not the main influences that keep seniors healthy and active, but as people age, they play an ever important supporting role. Older people, especially those over age 80, need more health care services than any other age group.

People are living longer, and the majority of seniors consider themselves to be in good to excellent health. There are different opinions about whether living longer will mean living healthier. Some believe that advances in medicine and technology will postpone illness to the very end of life: people will live healthy until they die, requiring less medical and health care than they do now. Others believe that longer lives will only delay or even prolong the years of declining health. Although the truth is probably somewhere in between, there is more evidence to support the second opinion. Overall, the prevalence of chronic disease and long-term disability is increasing as people live longer. People are being kept alive longer with chronic and disabling conditions than in the past, and therefore require more medical and health care. At the same time, there is some evidence that older people are over-medicated and receive more medical intervention than necessary.[68]

As our population ages, should medical research focus more on quality of life, and less on keeping people alive?

The patterns of illness affecting later life

are changing. While rates of heart disease and stroke are decreasing, seniors are experiencing more chronic and degenerative conditions, including cancer, osteoporosis and respiratory illnesses.[69] Regardless of trends in specific conditions, however, an older population will mean that the numbers of people affected with every condition associated with aging will increase substantially.

What policies can reduce unnecessary treatment of seniors, and provide necessary treatments in more cost-effective ways?

Dementia is among the most distressing and demanding of illnesses encountered in later life. The prevalence of dementia increases sharply in old age, and women are twice as likely to suffer from dementia as men. The 1991 Canadian Study of Health and Aging found that at age 65-74, the rate of dementia is 2.4% of the population, and at age 85+ the rate is closer to 34.5%. In 1991, approximately one-half of people with dementia were living in institutions. By 2031, the number of people with dementia in Canada is projected to triple, from 252,000 in 1991, to close to 800,000 in the year 2031.[70]

What health promotion and prevention programs need to be created now to promote healthy active aging?

Overall disability rates are not expected to decrease in the coming decades. Assuming that rates of disability and institutionalization remain constant over time, Statistics Canada projects that the number of Atlantic seniors with severe disabilities will increase by close to 50%, and the increase in the number of seniors requiring institutionalization will increase by more than 50%.[71]

What models exist for supporting family care givers and reducing the burdens of home care? What is the role of communities and public institutions in ensuring that supports are

Currently, the largest percentage of provincial health care budgets is devoted to seniors. In 1994, spending on health care in the Atlantic provinces was $6,126 per person for those 65 and over, while spending on the 45-64 age group was only $1,439 per person. These two groups account for three-quarters of health spending. In 1994, the cost of health care for seniors and the percentage of total provincial health care cost were: Nova Scotia - $650 million (48%), New Brunswick - $588 million (50%), Newfoundland - $417 million (46%) and Prince Edward Island - $98 million (47%).[72] Clearly, population aging will require that we eliminate over-medication and unnecessary treatment, and find more cost-effective ways to deliver necessary health care services.

Prevention and Promotion

Services such as flu shots, fitness classes, hearing clinics and foot and dental care help older people stay well. Health promotion programs including leisure, recreation and lifelong learning also contribute to healthy aging. Today's seniors have healthier lifestyles than earlier

generations. The next generation of seniors, who are more knowledgeable about preventive health practices, may experience even lower rates of heart disease, cancer and other conditions in the coming decades.

Prevention and promotion programs instituted now can help keep the large population of "baby boomers" independent and out of institutions.

Home Care

Health reform in the Atlantic provinces is shifting responsibility for the care of sick and infirm elderly onto communities and families. Increasingly, frail seniors are being cared for at home. Many need a range of health care services, including nursing care and physical and occupational therapy. Institutional short-term "respite" beds are needed to relieve family care givers and for short stays when care at home is not feasible. The current level of spending on home care across Canada is approximately 4% of provincial health care expenditures.

Out-of-pocket health expenditures by seniors have increased as well. Services not provided in hospitals are less likely to be covered by provincial health plans, and increasing drug costs have led to increased co-payments within drug plans. The rapid growth of private home care providers is evidence of the existing gap in publicly funded home care services. These trends have led to calls to "fund the care, not the site."

In the coming decades, as governments increasingly look to home care as a means of controlling institutional costs, the challenge to improve home care services for the elderly will grow, and pressure on governments to do so is likely to be intense.

Institutional Care

In general, seniors are hospitalized more frequently and need longer

hospital stays than younger people. They require physician and nursing care more frequently. The most disabled and those with severe dementia require long-term institutional care.

What supports are available for seniors who have no family nearby to provide care, especially in rural communities?

The vast majority of seniors live at home, because that is where they want to be. Only 8% of all seniors in Canada live in institutions such as hospitals and nursing homes. Older seniors, especially those with disabilities, are more likely to be institutionalized. In 1991, one-third of those 85 and over and nearly one-half of older seniors with disabilities were living in long-term care facilities. Incontinence, injuries due to falls and depression are conditions which often result in loss of independence and institutionalization of seniors, especially for those 85 and over.[73]

The need for health care services will grow steadily as the proportion of seniors increases in the next four to five decades. Research in Ontario suggests that the need for both hospital and long-term care beds for seniors will increase significantly over the next 10 years with the rapidly growing over-80 population. Rising numbers of seniors will require more nurses, nursing assistants, interns, residents and geriatric specialists.[74] In the Atlantic provinces, we can expect a similar picture to emerge. In addition, the lack of physicians in rural communities will likely become a source of increasing hardship for the fast-growing population of rural seniors.

How many health care beds and professionals will be needed in Atlantic Canada?

By one estimate, if current levels of service are maintained, *per capita* public spending on health care will rise by up to 40% between now and 2035 when the last of the "baby boomers" turn 65.[75] The *total cost* of publicly funded health care will nearly double.[76] This estimate does not consider impacts on the cost of new technologies, training health care workers and improvements to home care and pharmacare.

There is reason for optimism, however. Technological advances, including new drugs and surgical techniques, and improvements in early detection of certain diseases will contribute to reductions in major illnesses. In addition, most of the leading causes of chronic illness among seniors are largely preventable. Healthy lifestyles and routine health screening can reduce risk for many diseases.

What is the best way to provide health services for seniors in rapidly aging rural communities?

At the same time though, increasing inequality, social isolation, care giver stress and environmental pollution may diminish the effects of improved personal health practices and medical advances on the health of tomorrow's seniors. To avoid decline and ensure optimal health for

the next generation of seniors, action must be taken to address the broad determinants of health throughout the life cycle. Pursuing strategies to promote health at all stages of life will ensure a solid foundation for health in later life.

Canadian health care costs have been rising for decades, and health care as a percentage of budgets is growing in all provinces. The largest portions of growth in health care costs, however, have not been due to population aging. Inflation, population growth and the increasing use of health services by all age groups have been the main causes of increased health spending.[77] Even so, there is no doubt that population aging will increase costs of health services in the future. Meeting the health service needs of a growing senior population will require careful planning and targeting of resources, as will balancing community services and institutional care needs.

Shaping our Future

Population aging and the economy: they are two forces inextricably linked and slowly changing the shape of our society, and forces that will have countless consequences for upcoming generations of older people. While improving economic growth is essential for supporting the coming population of seniors, maintaining a healthy, active and engaged older population is central to a prosperous economy. Healthy, active seniors participate in the work force, contribute to communities as volunteers and are not as likely to require medical treatment and institutional care.

Healthy, active aging has little to do with the formal health care system, and everything to do with the broad social and economic conditions described in this report. Active aging means contributing to society and the economy for as long as possible, and having a wide range of options in work and leisure, in learning and in helping others. Staying healthy in later life enables active aging, which in turn fosters the conditions that keep us healthy and contribute to the prosperity of our society.

Maintaining prosperity and well-being in an aging society will require a broad range of economic, financial and social policies. The need for change will build gradually, increasing as people born in the decade before World War II reach their 80s around 2010. By then, the Atlantic region will have approximately 100,000 very old seniors aged 80 or more, and the "baby boomers" will be reaching retirement age. Nearly one-third of very old seniors will be women living alone. Many will have limited means and few options. Active aging will be more of a challenge for these women than for any other group. Their situation underlines the critical need to develop new support mechanisms to keep older seniors in their communities. "Baby boomers," who will swell the numbers of seniors in 30 years, may be somewhat better off than this first large wave of seniors, but by their very numbers they will pose an even greater challenge to current resources and services.

Although there is no reason to fear the future, there is clearly cause to begin planning now. Demography tells us that the total number of "dependents" on the working population will be no greater when the "baby boomers" reach old age than it was when they were children. Research carried out with Canadian data suggests, though, that supporting an older population will require very large increases in productivity. If this is true, Atlantic Canada -- where the work force will be smaller, the population older and productivity expected to be lower than in Canada as a whole -- will experience an even greater challenge.

One of the more positive aspects of population aging is that it is fairly predictable, and we can project many future service and resource needs based on what we already know about the population and

Megatrends

Demographic Trends

- Slower population growth
- Growing number of seniors
- Fewer young people
- The old are getting older
- More older single women
- Rapid aging of small towns and communities

Economic Trends

- Globalization
- Changing economic base
- Concentration of jobs in urban areas
- Weak economic growth and productivity
- Increasing unemployment
- Fewer working men, more working women
- Decline in regular, full-time jobs
- Slow income growth and few savings
- Increasing economic inequality

about seniors. Preparing for large waves of seniors will require collaboration across many sectors. Seniors must be consulted and actively involved in the design, implementation and evaluation of policies and programs of importance to them. Below is a list of some of the more obvious priorities for planning:

Maintaining income support programs for seniors:
Income support programs are keeping many seniors out of poverty now, and will be as necessary in the future as they are today.

Building social support networks for single seniors:
Social isolation of single older senior women may be the most immediate threat to population health.

Providing affordable and accessible housing options:
A range of housing options to meet the needs of the rapidly increasing population of single independent older seniors will be required within the next decade.

Exploring alternatives for public transportation in rural areas:
Providing convenient alternatives to driving will encourage all drivers to stop driving when it becomes unsafe and reduce the isolation of people who do not drive.

Increasing health promotion and prevention programming:
Health promotion and prevention programs contribute to healthy aging and independence.

Expanding home care and support programs:
A variety of flexible home care and support programs will help older people maintain their independence and take the pressure off health care institutions.

Developing programs to provide support to family care givers:
Caring for people in the home means increased dependence on family care givers. Support for these care givers, including respite, training and information, will be essential.

Planning for increased acute, long-term and palliative care:

Even an active, healthy population of seniors will require medical care, and this care will have to be provided in more cost-effective ways. More nurses, doctors, hospitals and long-term care facilities will be needed.

Providing flexible options for gradual transition from work to retirement:

Flexible retirement transition programs and financial incentives can reverse the trend to early retirement and keep older adults in the work force longer.

Life-long learning and retraining older workers for jobs in the new economy:

A vibrant economy requires an abundant supply of well-trained workers, and as the work force ages, younger workers will be less available.

Planning is most important for small towns and rural communities, which are aging more rapidly. These are areas where health services and public transportation are already in short supply.

As time passes, the overall social cost of population aging in the Atlantic region is shifting in a gradual and predictable way from the needs of the young to the needs of an older population. This shift will require a corresponding policy and program shift in health, housing, education, economics, transportation, social services and other public sectors. The challenge for policy makers in every sector will be to manage the gradual shift in public spending from the needs of a younger to an older population. This shift will require broad public understanding and support, and a shift in the way the public views taxation and public spending.

Decisions taken today, such as building schools, closing hospitals and training physicians, are decisions that stay with us well into the future. Developing, testing and implementing new models for meeting the needs of a growing senior population also take time. To shape a future of active aging and economic prosperity for the Atlantic region, the future must begin now.

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